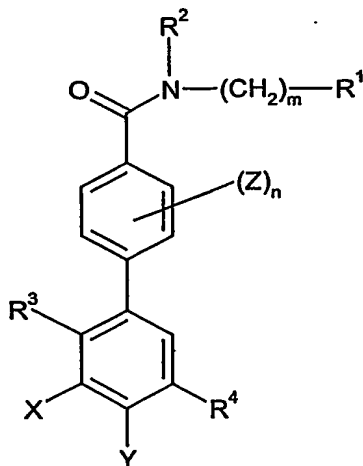


CLAIMS

1. A compound of formula (I):



(I)

wherein

R^1 is selected from hydrogen, C_{1-6} alkyl optionally substituted by up to three groups independently selected from C_{1-6} alkoxy, halogen and hydroxy, C_{2-6} alkenyl, C_{3-7} cycloalkyl optionally substituted by one or more C_{1-6} alkyl groups, phenyl optionally substituted by up to three groups independently selected from R^5 and R^6 , and heteroaryl optionally substituted by up to three groups independently selected from R^5 and R^6 ,

R^2 is selected from hydrogen, C_{1-6} alkyl and $-(CH_2)_p-C_{3-7}$ cycloalkyl optionally substituted by one or more C_{1-6} alkyl groups,

or $(CH_2)_mR^1$ and R^2 , together with the nitrogen atom to which they are bound, form a four- to six-membered heterocyclic ring optionally substituted by up to three C_{1-6} alkyl groups;

R^3 is chloro or methyl;

R^4 is the group $-NH-CO-R^7$ or $-CO-NH-(CH_2)_p-R^8$;

R^5 is selected from C_{1-6} alkyl, C_{1-6} alkoxy, $-(CH_2)_p-C_{3-7}$ cycloalkyl optionally substituted by one or more C_{1-6} alkyl groups, $-CONR^9R^{10}$, $-NHCOR^{10}$, $-SO_2NHR^9$, $-(CH_2)_qNHSO_2R^{10}$, halogen, CN, OH, $-(CH_2)_qNR^{11}R^{12}$, and trifluoromethyl;

R^6 is selected from C_{1-6} alkyl, C_{1-6} alkoxy, halogen, trifluoromethyl and $-(CH_2)_qNR^{11}R^{12}$;

R^7 is selected from hydrogen, C_{1-6} alkyl, $-(CH_2)_p-C_{3-7}$ cycloalkyl optionally substituted by one or more C_{1-6} alkyl groups, trifluoromethyl, $-(CH_2)_p$ heteroaryl optionally substituted by R^{13} and/or R^{14} , and $-(CH_2)_p$ phenyl optionally substituted by R^{13} and/or R^{14} ;

R^8 is selected from hydrogen, C_{1-6} alkyl, C_{3-7} cycloalkyl optionally substituted by one or more C_{1-6} alkyl groups, $CONHR^9$, phenyl optionally substituted by R^{13} and/or R^{14} , and heteroaryl optionally substituted by R^{13} and/or R^{14} ;

R⁹ and R¹⁰ are each independently selected from hydrogen and C₁₋₆alkyl, or

R⁹ and R¹⁰, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to

5 two C₁₋₆alkyl groups;

R¹¹ is selected from hydrogen, C₁₋₆alkyl and -(CH₂)_p-C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups,

R¹² is selected from hydrogen and C₁₋₆alkyl, or

10 R¹¹ and R¹², together with the nitrogen atom to which they are bound, form a five or six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵;

R¹³ is selected from C₁₋₆alkyl, C₁₋₆alkoxy, -(CH₂)_p-C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups, -CONR⁹R¹⁰, -NHCOR¹⁰, halogen, CN, -(CH₂)_qNR¹¹R¹², trifluoromethyl, phenyl optionally substituted by one or more R¹⁴

15 groups and heteroaryl optionally substituted by one or more R¹⁴ groups;

R¹⁴ is selected from C₁₋₆alkyl, C₁₋₆alkoxy, halogen, trifluoromethyl and -NR¹¹R¹²;

R¹⁵ is selected from hydrogen and methyl;

X and Y are each independently selected from hydrogen, methyl and halogen;

20 Z is selected from -(CH₂)_sOR¹⁶, -(CH₂)_sNR¹⁶R¹⁷, -(CH₂)_sCH₂CH₂R¹⁶, -(CH₂)_sCOOR¹⁶, -(CH₂)_sCONR¹⁶R¹⁷, -(CH₂)_sNHCOR¹⁶, -(CH₂)_sNHCONR¹⁶R¹⁷, -(CH₂)_sSO₂R¹⁶, -(CH₂)_sSO₂NR¹⁶R¹⁷ and -(CH₂)_sNHSO₂R¹⁶;

R¹⁶ is selected from hydrogen, C₁₋₆alkyl optionally substituted by up to two hydroxy groups, -(CH₂)_tOR¹⁸, -(CH₂)_tNR¹⁸R¹⁹, -(CH₂)_tNHSO₂R¹⁸, -(CH₂)_tCONR¹⁸R¹⁹, -(CH₂)_tCOOR¹⁸, -(CH₂)_theteroaryl optionally substituted by up to

25 two groups independently selected from halogen, C₁₋₆alkyl and oxo, and -(CH₂)_tphenyl optionally substituted by up to two groups independently selected from halogen, C₁₋₆alkyl and C₁₋₆alkoxy,

R¹⁷ is selected from hydrogen and C₁₋₆alkyl, or

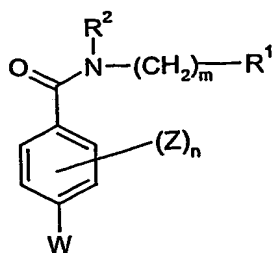
30 R¹⁶ and R¹⁷, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two groups independently selected from oxo, halogen and C₁₋₆alkyl;

R¹⁸ and R¹⁹ are each independently selected from hydrogen and C₁₋₆alkyl optionally substituted by up to two hydroxy groups, or

35 R¹⁸ and R¹⁹, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two groups independently selected from oxo, halogen and C₁₋₆alkyl;

40 m is selected from 0, 1, 2, 3 and 4, wherein each carbon atom of the resulting carbon chain may be optionally substituted with up to two groups independently selected from C₁₋₆alkyl and halogen;

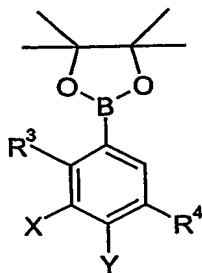
- n is 1;
p is selected from 0, 1 and 2;
q is selected from 0, 1, 2 and 3;
r is selected from 0 and 1;
5 s is selected from 0, 1, 2, 3 and 4; and
t is selected from 1, 2, 3 and 4;
or a pharmaceutically acceptable derivative thereof.
- 10 2. A compound according to claim 1 wherein R¹ is selected from C₁₋₆alkyl, C₃₋₇cycloalkyl and phenyl optionally substituted by up to three groups selected from R⁵ and R⁶.
3. A compound according to claim 1 or claim 2 wherein R¹ is C₃₋₆cycloalkyl.
- 15 4. A compound according to any one of the preceding claims wherein R² is hydrogen.
5. A compound according to any one of the preceding claims wherein m is 0 or 1.
- 20 6. A compound according to any one of the preceding claims wherein m is 1.
7. A compound according to any one of the preceding claims wherein R⁸ is C₃₋₆cycloalkyl.
- 25 8. A compound according to any one of the preceding claims wherein Z is selected from -(CH₂)₅OR¹⁶, -(CH₂)₅NR¹⁶R¹⁷, -(CH₂)₅NHCOR¹⁶, -(CH₂)₅NHCONR¹⁶R¹⁷ and -(CH₂)₅NHSO₂R¹⁶.
- 30 9. A compound according to claim 1 substantially as hereinbefore defined with reference to any one of Examples 1 to 48, or a pharmaceutically acceptable derivative thereof.
10. A process for preparing a compound according to any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, which comprises:
- 35 (a) reacting a compound of (II)



(II)

in which R¹, R², Z, m and n are as defined in claim 1 and W is halogen,
with a compound of formula (III)

5

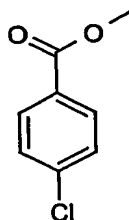


(III)

in which R³, R⁴, X and Y are as defined in claim 1,
in the presence of a catalyst, or

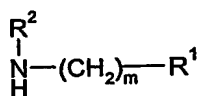
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(b) reacting a compound of formula (VIII)



(VIII)

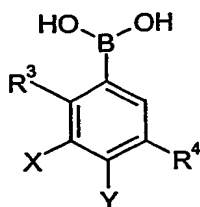
15 with a compound of formula (III) as hereinbefore defined and then reacting the acid thus
formed with an amine of formula (V)



(V)

20 in which R¹, R² and m are as defined in claim 1,
under amide forming conditions

(c) reacting a compound of formula (II) as hereinbefore defined with a compound of
formula (IX)

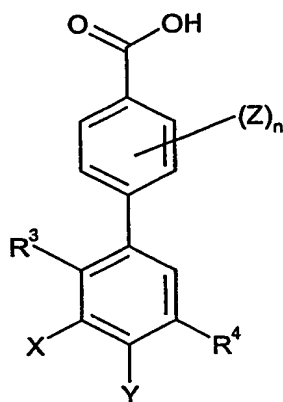


(IX)

in which R^3 , R^4 , X and Y are as defined in claim 1,
in the presence of a catalyst,

5

(d) reacting a compound of formula (X)

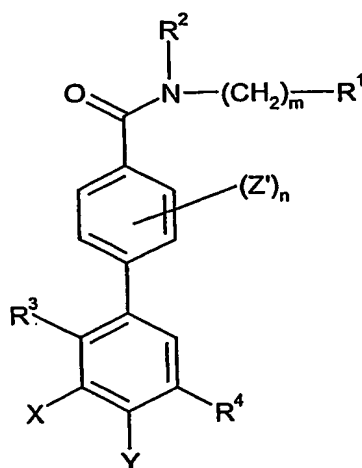


(X)

10 in which R^3 , R^4 , X, Y, Z and n are as defined in claim 1,
with an amine compound of formula (V) as defined above,
under amide forming conditions,

) (e) final stage modification of one compound of formula (I) into another compound of
15 formula (I), or

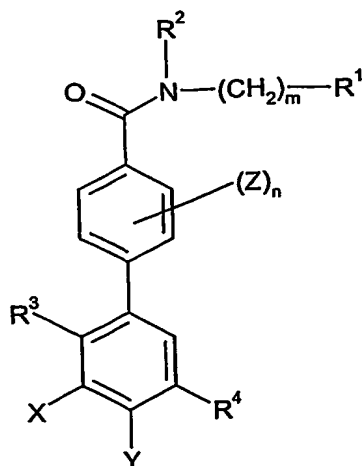
(f) conversion of a compound of formula (XII)



(XII)

in which Z' is a group convertible to Z as defined in claim 1.

- 5 11. A pharmaceutical composition comprising at least one compound according to any one of claims 1 to 9, or a pharmaceutically derivative thereof, in association with one or more pharmaceutically acceptable excipients, diluents and/or carriers
- 10 12. A method for treating a condition or disease state mediated by p38 kinase activity or mediated by cytokines produced by the activity of p38 kinase comprising administering to a patient in need thereof a compound according to any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof.
- 15 13. A compound according to any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, for use in therapy.
- 20 14. Use of a compound according to any one of claims 1 to 9, or a pharmaceutically acceptable derivative thereof, in the manufacture of a medicament for use in the treatment of a condition or disease state mediated by p38 kinase activity or mediated by cytokines produced by the activity of p38 kinase.
15. A compound of formula (IA):



(IA)

wherein

R^1 is selected from hydrogen, C₁₋₆alkyl optionally substituted by up to three groups independently selected from C₁₋₆alkoxy, halogen and hydroxy, C₂₋₆alkenyl, C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups, phenyl optionally substituted by up to three groups independently selected from R^5 and R^6 , and heteroaryl optionally substituted by up to three groups independently selected from R^5 and R^6 ,

R^2 is selected from hydrogen, C₁₋₆alkyl and $-(CH_2)_p$ -C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups,
or $(CH_2)_mR^1$ and R^2 , together with the nitrogen atom to which they are bound, form a four- to six-membered heterocyclic ring optionally substituted by up to three C₁₋₆alkyl groups;

R^3 is chloro or methyl;

R^4 is the group $-NH-CO-R^7$ or $-CO-NH-(CH_2)_p-R^8$;

R^5 is selected from C₁₋₆alkyl, C₁₋₆alkoxy, $-(CH_2)_p$ -C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups, $-CONR^9R^{10}$, $-NHCOR^{10}$, $-SO_2NHR^9$, $-(CH_2)_qNHSO_2R^{10}$, halogen, CN, OH, $-(CH_2)_qNR^{11}R^{12}$, and trifluoromethyl;

R^6 is selected from C₁₋₆alkyl, C₁₋₆alkoxy, halogen, trifluoromethyl and $-(CH_2)_qNR^{11}R^{12}$;

R^7 is selected from hydrogen, C₁₋₆alkyl, $-(CH_2)_p$ -C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups, trifluoromethyl, $-(CH_2)_r$ heteroaryl optionally substituted by R^{13} and/or R^{14} , and $-(CH_2)_r$ phenyl optionally substituted by R^{13} and/or R^{14} ;

R^8 is selected from hydrogen, C₁₋₆alkyl, C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups, $CONHR^9$, phenyl optionally substituted by R^{13} and/or R^{14} , and heteroaryl optionally substituted by R^{13} and/or R^{14} ;

R^9 and R^{10} are each independently selected from hydrogen and C₁₋₆alkyl, or

R^9 and R^{10} , together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom

selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two C₁₋₆alkyl groups;

R¹¹ is selected from hydrogen, C₁₋₆alkyl and -(CH₂)_p-C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups,

5 R¹² is selected from hydrogen and C₁₋₆alkyl, or

R¹¹ and R¹², together with the nitrogen atom to which they are bound, form a five or six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵;

10 R¹³ is selected from C₁₋₆alkyl, C₁₋₆alkoxy, -(CH₂)_p-C₃₋₇cycloalkyl optionally substituted by one or more C₁₋₆alkyl groups, -CONR⁹R¹⁰, -NHCOR¹⁰, halogen, CN, -(CH₂)_qNR¹¹R¹², trifluoromethyl, phenyl optionally substituted by one or more R¹⁴ groups and heteroaryl optionally substituted by one or more R¹⁴ groups;

R¹⁴ is selected from C₁₋₆alkyl, C₁₋₆alkoxy, halogen, trifluoromethyl and -NR¹¹R¹²;

15 R¹⁵ is selected from hydrogen and methyl;

X and Y are each independently selected from hydrogen, methyl and halogen;

Z is selected from -(CH₂)_sOR¹⁶, -(CH₂)_sNR¹⁶R¹⁷, -(CH₂)_sCH₂CH₂R¹⁶, -(CH₂)_sCOOR¹⁶, -(CH₂)_sCONR¹⁶R¹⁷, -(CH₂)_sNHCOR¹⁶, -(CH₂)_sNHCONR¹⁶R¹⁷, -(CH₂)_sSO₂R¹⁶, -(CH₂)_sSO₂NR¹⁶R¹⁷ and -(CH₂)_sNHSO₂R¹⁶;

20 R¹⁶ is selected from hydrogen, C₁₋₆alkyl, -(CH₂)_tOR¹⁸, -(CH₂)_tNR¹⁸R¹⁹, -(CH₂)_tCOOR¹⁸, -(CH₂)_theteroaryl optionally substituted by up to two groups independently selected from halogen and C₁₋₆alkyl, and -(CH₂)_tphenyl optionally substituted by up to two groups independently selected from halogen, C₁₋₆alkyl and C₁₋₆alkoxy,

25 R¹⁷ is selected from hydrogen and C₁₋₆alkyl, or

R¹⁶ and R¹⁷, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two groups independently selected from oxo, halogen and C₁₋₆alkyl;

30 R¹⁸ and R¹⁹ are each independently selected from hydrogen and C₁₋₆alkyl, or

• R¹⁸ and R¹⁹, together with the nitrogen atom to which they are bound, form a five- to six-membered heterocyclic ring optionally containing one additional heteroatom selected from oxygen, sulfur and N-R¹⁵, wherein the ring is optionally substituted by up to two groups independently selected from oxo, halogen and C₁₋₆alkyl;

35 m is selected from 0, 1, 2, 3 and 4, wherein each carbon atom of the resulting carbon chain may be optionally substituted with up to two groups independently selected from C₁₋₆alkyl and halogen;

n is 1;

40 p is selected from 0, 1 and 2;

q is selected from 0, 1, 2 and 3;

r is selected from 0 and 1;

s is selected from 0, 1, 2, 3 and 4; and
t is selected from 2, 3 and 4;
or a pharmaceutically acceptable derivative thereof.